



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,595	01/30/2004	Mehrban Jam	10005245-2	8588

7590 07/18/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

EISEN, ALEXANDER

ART UNIT PAPER NUMBER

2629

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/769,595

Applicant(s)

JAM, MEHRBAN

Examiner

Alexander Eisen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 33-42 are objected to because of the following informalities: claims recite dependency from claim 12, which is an apparent typographical error (should be dependent from claim 32?). Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 21, 22, 27 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Mato, US 6,204,839.

With respect to claim 21 Mato discloses a keyboard comprising a plurality of keys 52 with a plurality of key areas and a plurality of key sensors 48; and a mode switch 104 (FIG. 1; col. 3, ll. 32-38; col. 6, ll. 53-64) for switching the keyboard from typing mode to a pointing mode, in which each of the plurality of key sensors generate a corresponding pointer movement signal (FIGS. 1-2 and 6-8; col. 3, ll. 9-21; col. 5, ll. 3-40).

As pertaining to claim 22, the keyboard further comprises a surface layer 46, wherein the plurality of key areas (areas where the keys are disposed on) is arranged on a top side of the surface layer.

Art Unit: 2629

As pertaining to claim 27, since according to Mato the switching the mode switch between the modes requires user's action, it is inherent that the keyboard would stay in a selected mode until the switch is deactivated by a user (col. 6, ll. 58-64).

As pertaining to claim 30 each key comprises corresponding switch 52 and a corresponding key chip 48.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mato in view of Milkan, US 6,469,694.

Mato does not disclose that the keyboard further comprises a left mouse and a right mouse button.

Milkan teaches a keyboard with mouse emulation function, wherein some key are signed such function of a mouse as a left mouse and a right mouse button (col. 6, ll. 35-46).

It would have been obvious to one of ordinary skill in the art at the time when the invention was made to add the functionality of the Milkan keyboard to the keyboard of Mato, because it would eliminate the need for separate mouse.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mato in view of Crowley et al., hereinafter Crowley, US 5,459,461.

Art Unit: 2629

Mato does not disclose that the keyboard is foldable, but foldable keyboard and their advantage is known in the art, and Crowley, for instance, discloses one.

It would have been obvious to one of ordinary skill in the art at the time when the invention was made to improve the keyboard of Mato with flexibility taught by Crowley, because it would allow to maintain or store such modified keyboard in a minimum space while to have equal to full keyboard functionality (see Crowley; col. 5, lines 7-12).

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 21-42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,727,829. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 21-27 and 32-37 of current application contain the limitations similar to those of claims 1 and 9 of the Patent; claims 28, 38 are similar to claims 7 and 14; claims 29 and 39 cover the

Art Unit: 2629

same subject matter as claims 8 and 15; claims 30 and 40 – claims 2 and 10; and claims 31 and 41 are similar to claims 3 and 11 of the Patent. The independent claims 21 and 32 could be easily derived by those of ordinary skill in the art at the time when the invention was made by deleting some limitations from the claims 1 and 9 of the Patent, hence they would have been obvious to those artisans.

***Allowable Subject Matter***

9. Claims 23-26 and 31 are objected to as being dependent upon a rejected base claim, but pursuant to a timely filed terminal disclaimer would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the references, either singly or in combination, teach or fairly suggest a speed of a pointer based on a key distance from corresponding key to a reference point.

**Takeda, US 5,041,819**, discloses determining direction of a pointer movement based on a key direction (direction of corresponding key area) to a reference point, but fail to teach the feature outlined above.

**Nango, JP 07-319596**, discloses a keyboard with pointing function, wherein keys control cursor movement depending on their distance from reference key.

10. Claims 32-42 would be allowed, pursuant to a timely filed terminal disclaimer.

None of the prior art has been found that suggested a modification of or a combination with the cited prior art so as to arrive to the combination of the limitations of independent claim 32, claims 33-42 being dependent therefrom, including a plurality of hidden key comprising a plurality of unmarked keys and a plurality of key sensors proximate to the plurality of marked and unmarked keys.

Art Unit: 2629

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Santilli, US 5,675,361**, discloses dual-function keyboard having keys for sensing pointer direction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (571) 272-7687. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alexander Eisen  
Primary Examiner  
Art Unit 2629

7 July 2006